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PATENT

HP Docket No.: 10001840-1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s):   Roy R. Faget

Group Art Unit: 2124

Serial No.:   09/505,382

Examiner: Chat C. Do

Filed: February 16, 2000

Title: Apparatus and Method for Sharing Data FET for a Four-Way Multiplexer (as amended)

Box Non-Fee Amendment
U.S. Patent and Trademark Office
Washington, DC 20231

AMENDMENT AND RESPONSE UNDER 37 CFR 1.111

Sir:

In response to the October 17, 2002 Office Action, please amend the above-identified application as follows:

IN THE TITLE:

Amend the title to read:

"Apparatus and Method for Sharing Data FET for a Four-Way Multiplexer" ✓

IN THE SPECIFICATION:

Replace the paragraph beginning at page 2, line 4, with the following rewritten paragraph:

--The present invention relates to a multiplexer for shifting data.--

Replace the paragraphs beginning at page 2, line 13, with the following rewritten paragraphs:

--FMAC operations are implemented in multiple stages, and the final stage is used to normalize the value of the mantissa of the result. In particular, according to use of floating point numbers complying with the IEEE standard, the result is shifted to obtain a leading one in the mantissa and thus remove all leading zeros. This produces a normalized result for the FMAC operation. To obtain a leading one in the result, multiplexers are typically used in order to shift the result until the value one resides in the most significant bit position.

Multiplexers are known in the art and use control signals in order to shift input data among output lines based upon the control signals. Multiplexers can require many inputs for the data lines and the control signals, and each data input can require a separate data line and individual transistor for interfacing the data line with a corresponding logic gate that performs the data shifting. Due to the high number of inputs, individual data lines increase

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